

Date: \* Thursday, 4/12/2007 8:44:56 AM  
User: Kim Johnston

# **Process Sheet**

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SADDLE FITTING, AFT (OUTBOARD/INBOARD)
Job Number	: 31717		
Estimate Number	: 10533		
P.O. Number	: <u>N/A</u>	Part Number	: D2573
This Issue	: 4/12/2007	Drawing Number	: D2573 REV E
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <u>N/A</u>	Drawing Revision	: E
Previous Run	: 30594	Material	: <u>N/A</u>
Written By	: _____	Due Date	: 4/30/2007
Checked & Approved By	: <u>9/07.04.12</u>	Qty:	12 Um: Each
Comment	: Est: I As Per RevE 06-01-27 JLM		

## **Additional Product**

Job Number:



Seq. #:	Machine Or Operation:	Description:
---------	-----------------------	--------------

1.0	D6101007	7075-T7351 8.25X7.75X2.5
-----	----------	--------------------------



\*Comment: Qty.: 1.0000 Each(s)/Unit Total: 12.0000 Each(s)  
7075-T7351 8.25X7.75X2.5  
Make from D6101-007 billet for D2573  
Ensure that grain is along 7.75" length  
Batch No: B25354 (x12) En 07/05/03

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1  
Program Batch No. B31717 Double check by: BE

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets  
2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets  
3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets  
4-Deburr and remove all machining marks  
5-Tumble to remove sharp edges.

MS/Er 01/05/08 12

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
-----	---------------	------------------------------



Comment: CONVENTIONAL MILLING MACHINE  
Machine keyway as per dwg D2573 & D2574

MS/Er 01/05/08 12

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

MS/Er 01/05/08 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/05/11

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 4/12/2007 8:44:56 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, AFT (OUTBOARD/INBOARD)

Job Number: 31717

Part Number: D2573

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.L 07/05/08

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

FL

07/05/09 (12)

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

m-l 07/05/09

(12X)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

Eff 07/05/10

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

Eff 07/05/10 (12)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/05/11

Job Completion



U JWS 11

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	31717
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1

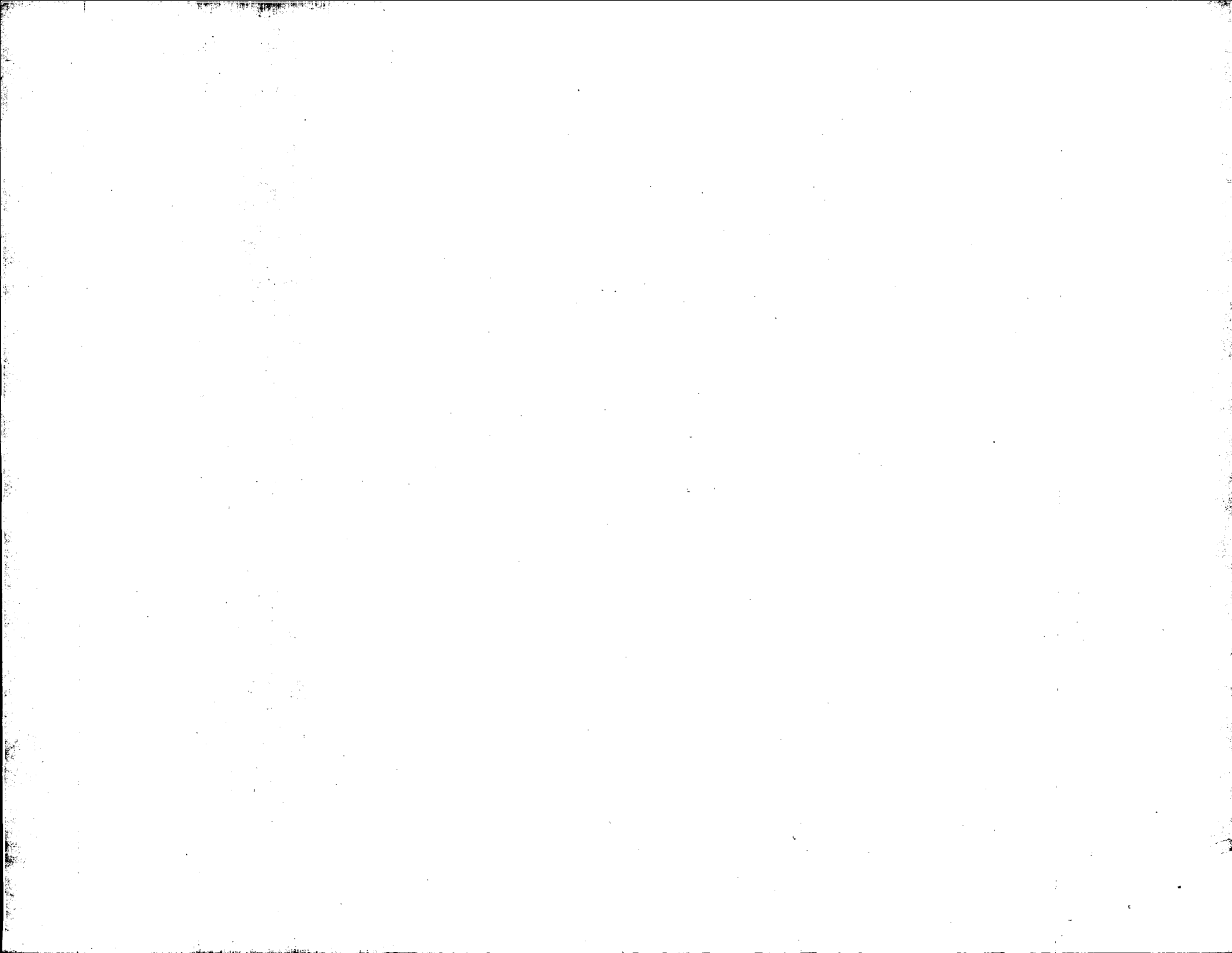
Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	0.440	0.440	0.440	0.440		
B	1.745	1.755		1.749	1.748	1.750	1.749		
C	3.495	3.505		3.499	3.500	3.499	3.499		
D	1.745	1.755		1.749	1.748	1.750	1.749		
E	7.990	8.010		8.000	8.003	8.003	8.004		
F	0.490	0.510		0.497	0.496	0.499	0.500		
G	0.257	0.262	DT8683	0.260	0.260	0.260	0.260		
H	0.375	0.380	DT8684	0.377	0.377	0.377	0.377		
I	0.490	0.510		0.499	0.502	0.503	0.502		
J	1.174	1.184		1.177	1.176	1.179	1.177		
K	0.558	0.578		0.562	0.566	0.565	0.565		
L	1.174	1.184		1.177	1.176	1.179	1.179		
M	1.365	1.375		1.367	1.368	1.366	1.366		
N	2.495	2.505		2.498	2.498	2.497	2.498		
O	4.119	4.129		4.121	4.124	4.121	4.121		
P	0.115	0.135		0.128	0.127	0.128	0.126		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.252	0.252	0.253	0.252		
S	0.115	0.135		0.129	0.126	0.126	0.127		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.238	0.242	0.242	0.239		
W	0.115	0.135		0.132	0.135	0.131	0.129		
X	0.308	0.313		0.310	0.310	0.310	0.311		
Y	0.760	0.765		0.765	0.765	0.765	0.765		
Z	0.352	0.372		0.367	0.362	0.362	0.362		
AA	0.470	0.530		0.500	0.520	0.520	0.520		
AB	0.615	0.635		0.628	0.629	0.627	0.628		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.249	0.250	0.249	0.250		
AE	1.500	1.520		1.512	1.512	1.513	1.513		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.252	0.257	0.249	0.248		
AI	2.000	2.020		2.002	2.002	2.003	2.002		
AJ	0.023	0.043		0.033	0.037	0.033	0.033		
Accept/Reject									

Measured by:	En
Date:	07/05/05

Audited by:	SA
Date:	07.05.06

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	31717
<b>Description:</b> Saddle, Aft Outboard		<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	0.440	0.440	0.440	0.440		
B	1.745	1.755		1.748	1.748	1.748	1.748		
C	3.495	3.505		3.499	3.500	3.500	3.497		
D	1.745	1.755		1.748	1.748	1.748	1.748		
E	7.990	8.010		8.002	8.003	8.004	8.001		
F	0.490	0.510		0.501	0.503	0.498	0.497		
G	0.257	0.262	DT8683	0.260	0.260	0.260	0.260		
H	0.375	0.380	DT8684	0.377	0.377	0.377	0.377		
I	0.490	0.510		0.501	0.503	0.500	0.500		
J	1.174	1.184		1.179	1.179	1.175	1.177		
K	0.558	0.578		0.566	0.566	0.565	0.567		
L	1.174	1.184		1.179	1.179	1.175	1.177		
M	1.365	1.375		1.369	1.369	1.369	1.369		
N	2.495	2.505		2.499	2.497	2.497	2.499		
O	4.119	4.129		4.122	4.121	4.121	4.123		
P	0.115	0.135		0.126	0.127	0.127	0.127		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.252	0.251	0.252	0.252		
S	0.115	0.135		0.127	0.127	0.130	0.126		
T	0.178	0.198		0.188	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.238	0.238	0.240	0.240		
W	0.115	0.135		0.129	0.129	0.133	0.131		
X	0.308	0.313		0.310	0.310	0.310	0.310		
Y	0.760	0.765		0.765	0.765	0.765	0.765		
Z	0.352	0.372		0.362	0.362	0.362	0.362		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.626	0.624	0.627		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.246	0.246	0.247	0.249		
AE	1.500	1.520		1.512	1.512	1.512	1.512		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.250	0.257	0.258	0.249		
AI	2.000	2.020		2.001	2.001	2.002	2.002		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by:	SD
Date:	07/05/06

Audited by:	SD
Date:	07/05/07

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	31717
<b>Description:</b> Saddle, Aft Outboard	<b>Part Number:</b>	D2573
<b>Inspection Dwg:</b> D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

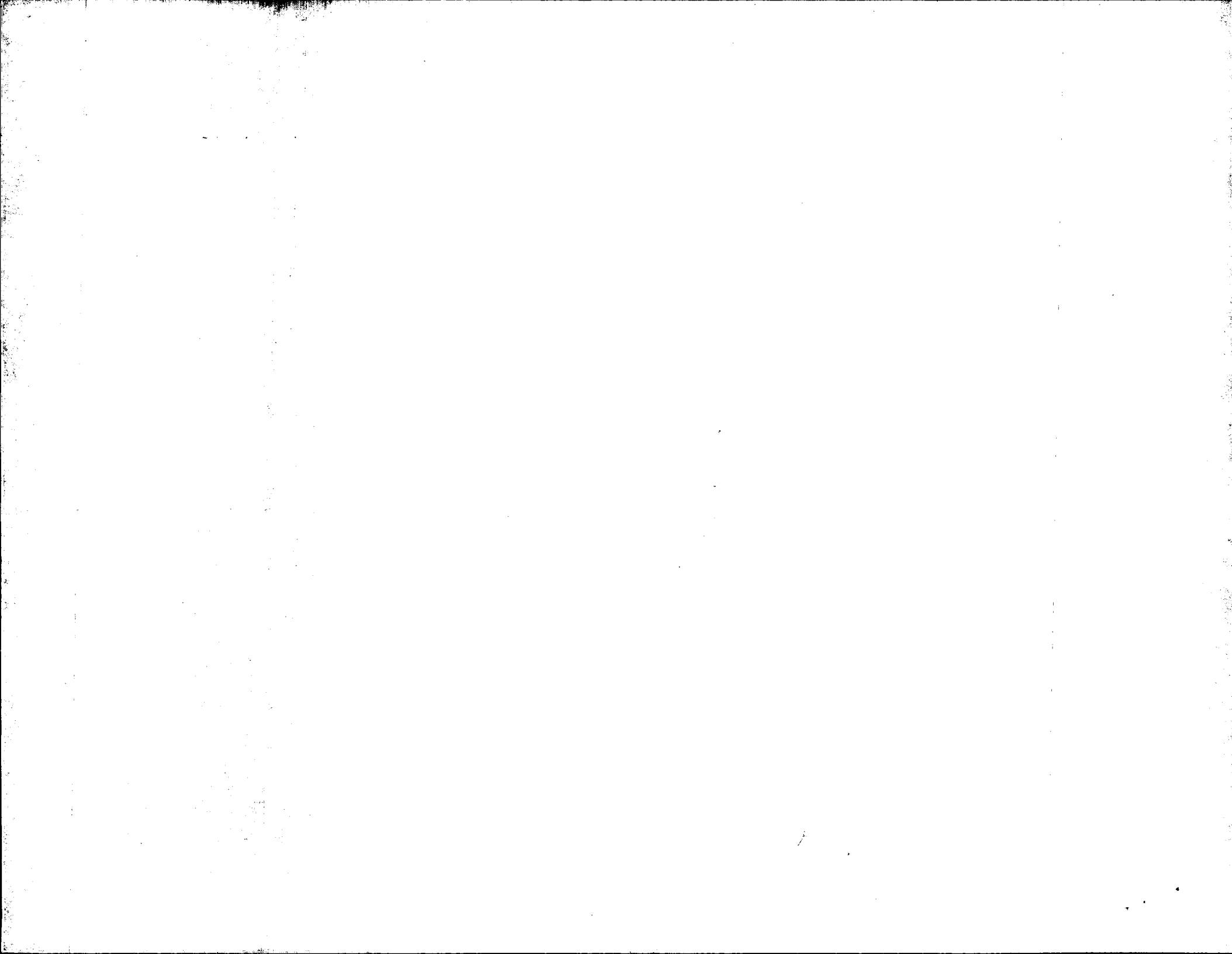
				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443	DT8682	0.440	0.440	0.440	0.440		
B	1.745	1.755		1.748	1.749	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.748	1.749	1.748	1.748		
E	7.990	8.010		8.003	8.001	8.001	8.001		
F	0.490	0.510		0.501	0.502	0.500	0.500		
G	0.257	0.262	DT8683	0.260	0.260	0.260	0.260		
H	0.375	0.380	DT8684	0.377	0.377	0.377	0.377		
I	0.490	0.510		0.503	0.501	0.500	0.500		
J	1.174	1.184		1.178	1.175	1.179	1.179		
K	0.558	0.578		0.566	0.566	0.565	0.565		
L	1.174	1.184		1.178	1.175	1.178	1.178		
M	1.365	1.375		1.366	1.367	1.367	1.367		
N	2.495	2.505		2.497	2.497	2.500	2.500		
O	4.119	4.129		4.121	4.121	4.122	4.122		
P	0.115	0.135		0.126	0.128	0.128	0.128		
Q	0.115	0.135		0.135	0.135	0.135	0.135		
R	0.240	0.260		0.252	0.253	0.252	0.252		
S	0.115	0.135		0.123	0.127	0.125	0.125		
T	0.178	0.198		0.189	0.188	0.188	0.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		0.238	0.237	0.238	0.238		
W	0.115	0.135		0.132	0.132	0.132	0.132		
X	0.308	0.313		0.310	0.310	0.312	0.312		
Y	0.760	0.765		0.765	0.765	0.765	0.765		
Z	0.352	0.372		0.367	0.365	0.368	0.365		
AA	0.470	0.530		0.500	0.500	0.500	0.500		
AB	0.615	0.635		0.626	0.628	0.628	0.628		
AC	0.053	0.073		0.063	0.063	0.063	0.063		
AD	0.240	0.260		0.248	0.247	0.248	0.248		
AE	1.500	1.520		1.512	1.513	1.511	1.512		
AF	0.115	0.135		0.135	0.135	0.135	0.135		
AG	0.240	0.280		0.260	0.260	0.260	0.260		
AH	0.240	0.260		0.250	0.251	0.251	0.251		
AI	2.000	2.020		2.002	2.003	2.002	2.002		
AJ	0.023	0.043		0.033	0.033	0.033	0.033		
Accept/Reject									

Measured by:	EP / NLS
Date:	07/05/08

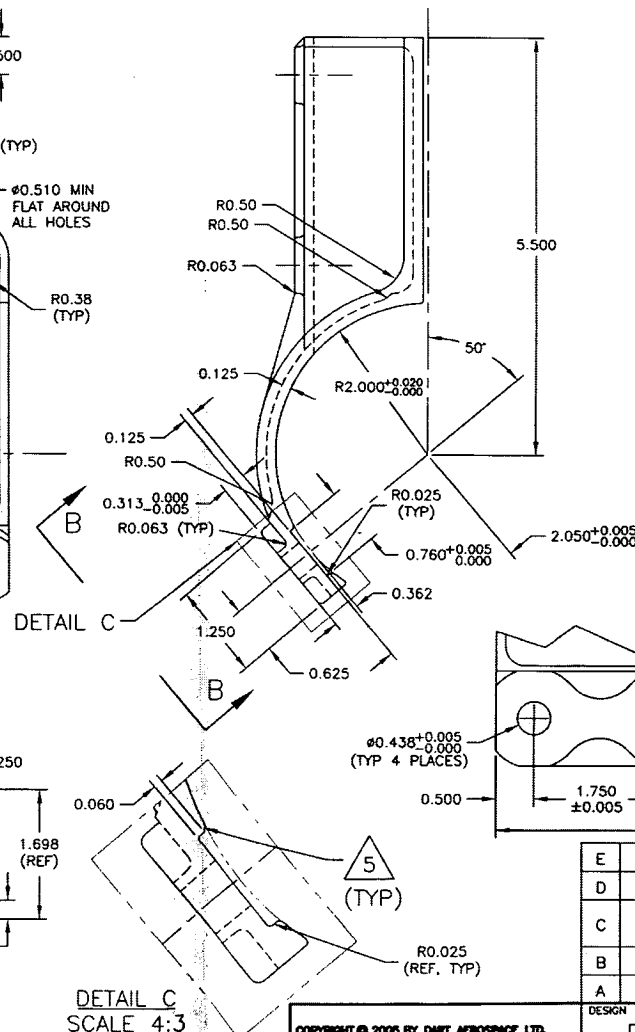
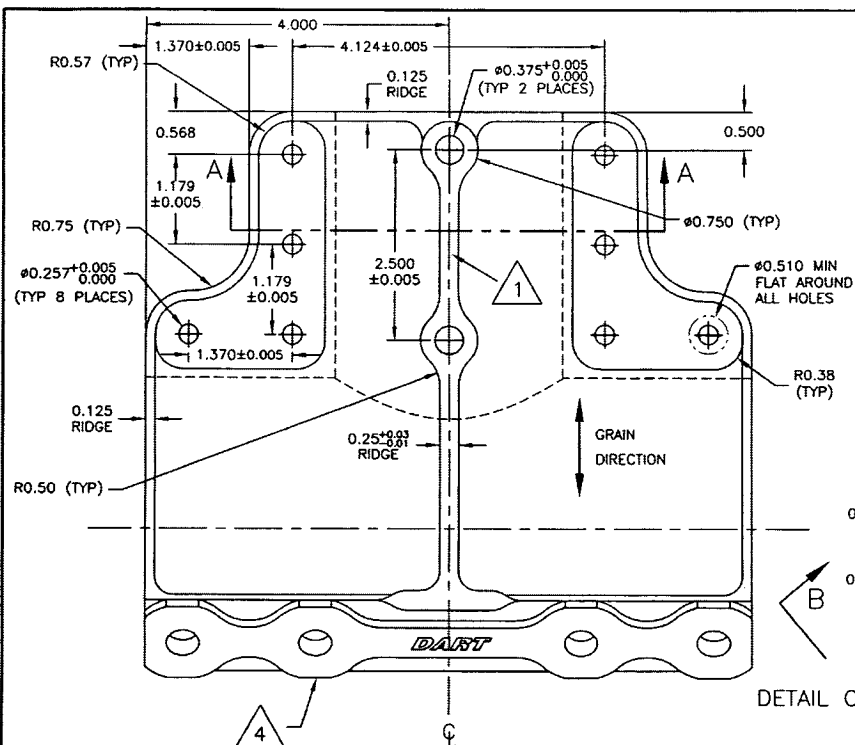
Audited by:	J.L
Date:	07/05/08

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	





05.12.06









## NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)

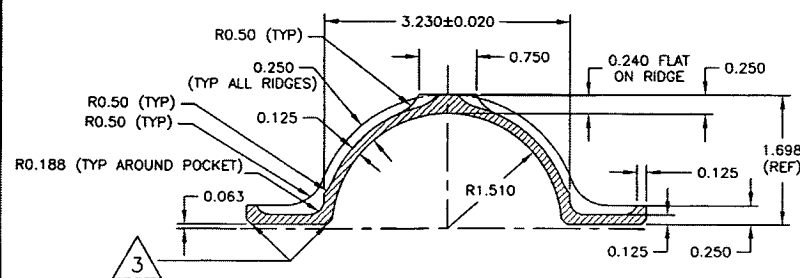
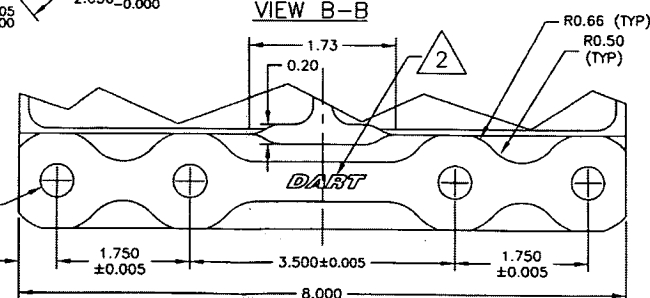
(REF DART SPEC. D6102-001)

FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3

BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED




- |   |   |
|---|---|
|  | ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010  |
|  | ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125  |
|  | CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)   |
|  | CHAMFER 0.063" x 45° ALL AROUND   |
|  | CHAMFER 0.033" x 45° (SEE DETAIL C)  |

VIEW B-B



SECTION A-A

DETAIL C  
SCALE 4:3

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCRP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN		DRAWN BY
DS	PH	 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA
CHECKED 	APPROVED 	DRAWING NO. D2573
DATE 05.07.13	TITLE OUTER AFT SADDLE	

**COPYRIGHT © 2005 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL  
AND IS SUPPLIED ON THE EXPRESS CONDITION  
THAT IT IS NOT TO BE USED FOR ANY PURPOSE  
OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

**DART**

**DART AEROSPACE LTD.**  
MARKET VILLAGE, ONTARIO, CANADA

DRAWING NO.	D2573
-------------	-------

TITLE	OUTER AFT SADDLE
-------	------------------

REV. E

SHEET 1 OF 1

**SCALE**

SECTION  
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 31717

